

WHAT IS CLAIMED IS:

- 1                   1.       A system for managing allocation levels of advertising inventory,  
2 comprising:
  - 3                   a plurality of categories of advertisements; and
  - 4                   a plurality of restrictions designed to limit said allocation levels of said
  - 5 advertising inventory;
    - 6                   wherein one or more of said plurality of restrictions are applied to one or
    - 7 more of said categories of advertisements so as to limit the availability of said one or
    - 8 more of said categories of advertisements.
- 1                   2.       The system according to claim 1, wherein each one of said plurality  
2 of categories of advertisements is designated a pricing level.
- 1                   3.       The system according to claim 1, wherein said plurality of  
2 restrictions are designed based on one or more demand analyses performed on said  
3 plurality of categories of advertisements.
- 1                   4.       The system according to claim 1, wherein ad revenue generated by  
2 sale of said advertising inventory is optimized by limiting the availability of said one or  
3 more of said categories of advertisements.
- 1                   5.       The system according to claim 1, wherein said one or more of said  
2 plurality of restrictions applied to said one or more of said plurality of categories of  
3 advertisements are adjusted in response to demand for said one or more of said plurality  
4 of categories of advertisements.
- 1                   6.       The system according to claim 5, wherein said demand for one of  
2 said plurality of categories of advertisements is calculated using a method comprising  
3 steps of:
  - 4                   generating a matrix having a plurality of rows and a plurality of columns,  
5 wherein a row and a column define a cell, each of said plurality of rows represents a  
6 specific day of delivery, each of said plurality of columns represents number of days  
7 before delivery, and value of a cell represents number of ad impressions to be delivered;
  - 8                   populating cells of said matrix with data;

9 plotting a graph having a y-axis and a x-axis, said y-axis representing day  
10 of delivery and said x-axis representing days before delivery, wherein data points on said  
11 graph correspond to said cells of said matrix;

12 identifying a data line from said graph based on a selected date; and  
13 extrapolating a requested data point using said data line.

5 an inventory management system designed to provide a response to said  
6 request issued by said ad request interface;

3 generating a matrix having a plurality of rows and a plurality of columns,  
4 wherein a row and a column define a cell, each of said plurality of rows represents a  
5 specific day of delivery, each of said plurality of columns represents number of days  
6 before delivery, and value of a cell represents number of ad impressions to be delivered;

7 populating cells of said matrix with data;

8 plotting a graph having a y-axis and a x-axis, said y-axis representing day  
9 of delivery and said x-axis representing days before delivery, wherein data points on said  
10 graph correspond to said cells of said matrix;

11 identifying a data line from said graph based on a selected date; and  
12 extrapolating a requested data point using said data line.

1 13. The system according to claim 7, wherein said advertising  
2 inventory has a plurality of categories of advertisements;

3 wherein said plurality of categories of advertisements have their respective  
4 pricing levels;

5 wherein said desired category of advertisements has the lowest pricing  
6 level amongst said respective pricing levels.

1 14. A system for managing advertising inventory to optimize ad  
2 revenue, comprising:

3 an ad request interface capable of issuing a request for a desired category  
4 of advertisements within said advertising inventory;

5 an inventory management system configured to interact with said ad  
6 request interface by forwarding a response to said ad request interface pursuant to said  
7 request; and

8 an availability allocation module designed to provide said response to said  
9 inventory management system;

10 wherein said response is prepared based on one or more selective  
11 restrictions designed to limit the quantity of said desired category of advertisements  
12 which are available for sale.

1 15. The system according to claim 14, wherein said request includes  
2 date and demographic information.

1                   16.     The system according to claim 14, wherein said inventory  
2 management system calculates an amount of available inventory for said desired category  
3 of advertisements; and

4                   wherein said availability allocation module adjusts said amount of  
5 available inventory based on said one or more selective restrictions and prepares said  
6 response using said adjusted amount of available inventory.

1                   17.     The system according to claim 16, wherein said amount of  
2 available inventory is adjusted based on demand for other categories of advertisements.

1                   18.     The system according to claim 17, wherein said desired category of  
2 advertisements has a pricing level;

3                   wherein said other categories of advertisements have their respective  
4 pricing levels; and

5                   wherein said pricing level of said desired category of advertisements is  
6 lowest amongst said respective pricing levels of said other categories of advertisements.

1                   19.     A method for managing allocation levels of advertising inventory,  
2 comprising steps of:

3                   classifying said advertising inventory into a plurality of categories of  
4 advertisements; and

5                   imposing at least one restriction on at least one of said plurality of  
6 categories of advertisements to limit the amount of said at least one of said plurality of  
7 categories of advertisements which is available for sale.

1                   20.     The method according to claim 19, further comprising a step of:

2                   adjusting said at least one restriction in response to demand for others of  
3 said plurality of categories of advertisements.

1                   21.     The method according to claim 19, wherein said at least one  
2 restriction is imposed based on respective demand for said plurality of categories of  
3 advertisements.

1                   22.     The method according to claim 19, wherein said plurality of  
2 categories of advertisements have their respective pricing levels; and

3 wherein said at least one of said plurality of categories of advertisements  
4 has a pricing level amongst the lowest of said respective pricing levels of said plurality of  
5 categories of advertisements.

1                   23. The method according to claim 19, wherein ad revenue generated  
2 by sale of said advertising inventory is optimized by said imposition of said at least one  
3 restriction.

3 receiving an availability request for a desired category of advertisements  
4 within said advertising inventory;

5 determining a quantity of said desired category of advertisements which  
6 are available for sale;

9 providing a response to said availability request using said adjusted  
10 quantity.

1                   25. The method according to claim 24, further comprising a step of:  
2                   adjusting said one or more restrictions in response to demand for other  
3                   categories of advertisements within said advertising inventory.

1                   26. A method for calculating a demand curve, comprising steps of:  
2                   generating a matrix having a plurality of rows and a plurality of columns,  
3                   wherein a row and a column define a cell, each of said plurality of rows represents a  
4                   specific day of delivery, each of said plurality of columns represents number of days  
5                   before delivery, and value of a cell represents number of ad impressions to be delivered;

10 identifying a data line from said graph based on a selected date; and  
11 extrapolating a requested data point using said data line.

1 27. A method for calculating a demand curve, comprising steps of:

